



**Via FTP Site Submittal and/or Federal Express**

November 13, 2014

Alison Hess, Standard Chlorine Chemical Co. RPM  
U.S. Environmental Protection Agency, Region 2  
Special Projects Branch  
Emergency and Remedial Response Division  
290 Broadway, 19th Floor  
New York, New York 10007-1866

**Re: Monthly Progress Report - October 2014  
Standard Chlorine Chemical Co. Inc. Site  
Kearny, Hudson County, New Jersey**

Dear Ms. Hess:

On behalf of the Performing Parties Group (Group), please find enclosed one hard copy of the October 2014 Monthly Progress Report for the Standard Chlorine Chemical Co. Inc. (SCCC) Site located in Kearny, New Jersey. This report has been prepared to address the monthly reporting requirements listed in Section V (Task 4 – Implementation of the RI/FFS Work Plan) of a Remedial Investigation/Focused Feasibility Study (RI/FFS) Statement of Work (SOW) issued by the United States Environmental Protection Agency (EPA) as Appendix A of an Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Focused Feasibility Study (Agreement) for the SCCC Site. An electronic copy of the report has been uploaded to the FTP site that has been established for the SCCC Site.

Please feel free to contact me at (412) 279-3363 if you have questions concerning this submittal.

Sincerely,

James Zubrow, P.G.  
Project Manager

cc: Jay Nickerson – NJDEP  
Leena Raut – EPA (electronic copy)  
Frances Zizila – EPA (electronic copy)  
Mitch Brourman – Beazer c/o TRMI (electronic copy)  
Teresa Jordan – Tierra (electronic copy)  
Nelson Olavarria – Cooper Industries, LLC (electronic copy)  
John McTigue – The Isosceles Group (electronic copy)

**STANDARD CHLORINE CHEMICAL CO. INC. SUPERFUND SITE  
MONTHLY PROGRESS REPORT  
OCTOBER 2014**

**I. Actions Completed During the Reporting Period (October 2014)**

Implementation of the Cultural Resources Survey Work Plan continued with the preparation of draft documents and exhibit.

Efforts continued to gain access to the New Jersey Department of Transportation (NJDOT) right-of-way, as necessary, for implementation of the approved scope of work for investigation of the dichlorobenzenes in a localized area south of the Site and outside of the barrier wall. KEY has secured Highway Occupancy Permits from NJDOT and is awaiting receipt from NJDOT of an access agreement which is necessary for work to proceed.

**II. Results of Sampling and Tests and Data Received by Respondents**

No data were received by Respondents during the reporting period.

**III. Work Planned for the Next Two Months (November and December 2014)**

Implementation of the Cultural Resources Survey Work Plan will be completed with the submittal to EPA of documents and exhibit.

The approved scope of work for investigation of the dichlorobenzenes in a localized area south of the Site and outside of the barrier wall will be implemented pending access from the NJDOT.

Monthly progress reports will be prepared and submitted to EPA.

Implementation of the Remedial Investigation/Focused Feasibility Study Work Plan will continue with the revision and resubmittal of the Baseline Human Health Risk Assessment Report to the EPA and NJDEP.

**IV. Problems Encountered/Anticipated Delays**

No problems were encountered. No delays are anticipated.

**V. Operations and Maintenance Information**

Routine operations and maintenance activities were completed. A summary of operations and maintenance activities are provided on a quarterly-basis. The summary for the third quarter of 2014 is included as Appendix A of this monthly report.

## **APPENDIX A**

**STANDARD CHLORINE CHEMICAL CO. INC. SITE – O&M STATUS REPORT  
QUARTERLY OPERATIONS MAINTENANCE AND MONITORING REPORT No. 07  
REPORTING PERIOD – JULY–SEPTEMBER 2014  
KEARNY, NEW JERSEY**

---

**1.0 DESCRIPTION OF ACTIVITIES COMPLETED**

**1.1 HYDRAULIC CONTROL TREATMENT SYSTEM (HCTS)**

- Continued HCTS operation, monitoring, inspection and reporting efforts as summarized below:
  - Average monthly flows for July, August and September 2014 were 25.7 gpm, 21.5 gpm and 14.8 gpm, respectively. The total volume of water treated this reporting period was 2,775,501 gallons.
  - Monthly NJPDES sample collection pursuant to NJ Permit No. NJ0155438 was completed. There were no exceedances of permit monitored constituents noted during this period. Whole Effluent Toxicity (WET) via Method 1002.0 (*Mysidopsis Bahia*), was reported at  $IC_{25} > 100\%$  growth for the 2014 3<sup>rd</sup> quarter monitoring event.
  - Water level gauging data collected during the reporting period from the piezometers, hydraulic control wells and DNAPL recovery wells are provided in Table 1. Water level data trends indicate inward gradients across the slurry wall have been achieved as of the September 22, 2014 gauging event. A graph showing historical groundwater gradient data is provided as Figure 1 of this submittal.

Figures 2 and 3 provide September 2014 potentiometric surface data (representing the most typical HCTS operational scenario for the reporting period), for both the shallow and deep monitoring zones respectively. Figure 2 shows pronounced gradients toward HCWs across the site within the shallow fill unit as well as a significant differential between inner and outer slurry wall piezometer pairs, indicating that the slurry wall is functioning as an effective hydraulic barrier. Potentiometric surface contours for the deep sand unit are provided on Figure 3. As indicated, the hydraulic gradient in the sand unit is essentially flat over the western two-thirds of the area enclosed by the barrier wall system. Slightly higher potentiometric surface elevations were measured on the unpaved Seaboard Site portion of the containment area, which could be indicative of localized recharge. Similar to the shallow unit, substantial differentials between the water levels inside and outside of the slurry wall exist which is an indication of the lack of hydraulic communication and groundwater flux through the barrier wall in both the shallow fill and deep sand unit.

Figures 4, 5 and 6 present graphs of the monthly (July, August and September 2014, respectively) water level measurements made in

**STANDARD CHLORINE CHEMICAL CO. INC. SITE – O&M STATUS REPORT  
QUARTERLY OPERATIONS MAINTENANCE AND MONITORING REPORT No. 07  
REPORTING PERIOD – JULY–SEPTEMBER 2014  
KEARNY, NEW JERSEY**

---

the shallow unit piezometers inside and outside of the slurry wall. The graphs show inward hydraulic gradients, substantial differentials between the water levels inside and outside of the slurry wall, and effective containment and capture from the low permeability barrier wall system.

## **1.2 DNAPL RECOVERY**

DNAPL recovery efforts for the third quarter of 2014 produced 193 gallons of DNAPL. A total of 4,849 gallons of DNAPL have been recovered from the DNAPL recovery well network since January 2012. Total DNAPL recovery to date is provided in the summary table below.

Well ID	July 2014 DNAPL Recovery (gal)	August 2014 DNAPL Recovery (gal)	September 2014 DNAPL Recovery (gal)	Total DNAPL Recovered (gal)
DRWL-1	NR	NR	25	359
DRWL-5	NR	NR	31	349
DRWL-7	NR	NR	NR	50
DRWL-9	NR	NR	NR	879
DRWL-10	NR	NR	NR	108
DRWL-11	52	54	31	3,104

## **1.3 NON-HCTS INSPECTIONS**

- Continued post-construction inspections.
- Annual asphalt IRM cover crack sealing efforts initiated the week of September 22, 2014.

## **1.4 ADDITIONAL COMPLETED EFFORTS**

- Consolidation Area cap and slurry wall working platform mowing and site wide vegetation control efforts were completed during the week of September 15, 2014.

**STANDARD CHLORINE CHEMICAL CO. INC. SITE – O&M STATUS REPORT  
QUARTERLY OPERATIONS MAINTENANCE AND MONITORING REPORT No. 07  
REPORTING PERIOD – JULY–SEPTEMBER 2014  
KEARNY, NEW JERSEY**

---

**2.0 PROJECTED FUTURE ACTIVITIES**

**2.1 HCTS RELATED EFFORTS**

- Continue HCTS operations, monitoring and maintenance.
- Continue dewatering of electrical pull boxes to assess and repair electrical runs from the HCTS building to individual HC and DR well control panels.
- Passive DNAPL recovery will continue.

**2.2 NON-HCTS RELATED EFFORTS**

- Routine Non-HCTS (consolidation area and IRM surface covers) inspections and maintenance will continue.
- Soil erosion areas and re-vegetation issues will be addressed, as necessary.
- Quarterly inspections of the surface cover systems and repair will continue.
- 2014 Supplemental Fresh Water Wetland Invasive Species Herbicide Treatment was conducted the first week of October 2014.

**STANDARD CHLORINE CHEMICAL CO. INC. SITE – O&M STATUS REPORT  
QUARTERLY OPERATIONS MAINTENANCE AND MONITORING REPORT No. 07  
REPORTING PERIOD – JULY–SEPTEMBER 2014  
KEARNY, NEW JERSEY**

---

**TABLES**

Table 1

**Standard Chlorine Chemical Co. Inc.**  
**3rd Quarter 2014 Progress Report**

**HCTS Gauging Data Summary**

Well ID	Top of Casing Elevation MSL (NAD 83)	Jul-14			Aug-14			Sep-14		
		Depth to Water (ft-TOC)	Total Depth (ft-TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft-TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft-TOC)	Groundwater Elevation MSL (NAD 83)
HC-PZ-1U	11.18	6.41	17.70	4.77	6.77	16.71	4.41	7.04	16.70	4.14
HC-PZ-2U	11.32	6.84	16.10	4.48	7.22	16.10	4.10	7.61	16.10	3.71
HC-PZ-3U	10.33	7.37	14.98	2.96	8.87	15.02	1.46	9.52	15.00	0.81
HC-PZ-4U	10.16	4.79	14.60	5.37	6.43	14.60	3.73	7.48	14.60	2.68
HC-PZ-6U	7.15	2.11	9.44	5.04	6.22	9.44	0.93	3.46	9.45	3.69
HC-PZ-7U	6.51	1.45	8.90	5.06	2.49	8.92	4.02	3.00	8.92	3.51
HC-PZ-8U	7.75	2.84	11.90	4.91	4.2	11.90	3.55	4.72	11.91	3.03
HC-PZ-9U	8.18	4.01	12.22	4.17	3.65	12.21	4.53	2.33	12.20	5.85
HC-PZ-10U	6.05	3.80	9.53	2.25	4.95	9.61	1.10	5.30	9.60	0.75
HC-PZ-11U	6.3	4.87	9.80	1.43	4.95	9.77	1.35	4.95	9.76	1.35
HC-PZ-12U	5.35	2.75	8.44	2.60	3.97	8.44	2.81	4.82	8.45	0.53
HC-PZ-13U	4.76	2.93	8.40	1.83	3.5	8.38	2.65	3.69	8.40	1.07
HC-PZ-14U	6.03	2.49	10.05	3.54	3.36	10.06	2.67	4.01	10.05	2.02
HC-PZ-15U	8.28	5.55	11.73	2.73	5.82	11.75	2.46	5.94	11.73	2.34
HC-PZ-1L	11.48	7.74	25.10	3.74	8.37	25.10	3.11	8.59	25.10	2.89
HC-PZ-2L	12.15	8.93	23.85	3.22	8.92	23.80	3.23	9.10	23.80	3.05
HC-PZ-3L	9.97	5.85	23.50	4.12	6.54	23.52	3.43	6.95	23.51	3.02
HC-PZ-4L	9.17	6.52	20.52	2.65	6.5	20.55	2.67	6.83	20.54	2.34
HC-PZ-6L	6.06	3.00	16.83	3.06	3.27	16.85	2.79	3.37	16.85	2.69
HC-PZ-7L	5.5	0.91	17.01	4.59	1.35	17.01	4.15	1.69	17.01	3.81
HC-PZ-8L	8.3	3.43	21.50	4.87	4.64	21.39	3.66	5.09	21.40	3.21
HC-PZ-9L	8.57	3.30	21.00	5.27	4.2	21.00	4.37	2.93	21.00	5.64
HC-PZ-10L	5.8	2.53	18.75	3.27	3.44	18.75	2.36	3.92	18.75	1.88
HC-PZ-11L	6.91	5.16	19.10	1.75	5.35	19.06	1.56	5.27	19.06	1.64
HC-PZ-12L	5.07	1.79	15.76	3.28	2.7	15.78	3.47	3.36	15.75	1.71
HC-PZ-13L	4.77	3.01	16.25	1.76	3.4	16.25	2.33	3.42	16.25	1.35
HZ-PZ-14L	6.43	2.84	18.85	3.59	3.5	18.87	2.93	3.96	18.87	2.47
SC-MW-16L	8.02	5.08	19.82	2.94	5.19	19.85	2.83	5.25	19.83	2.77

Table 1

**Standard Chlorine Chemical Co. Inc.**  
**3rd Quarter 2014 Progress Report**

**HCTS Gauging Data Summary**

Well ID	Jul-14			Aug-14			Sep-14			
	Top of Casing Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft-TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
HCWU-1	10.30	5.63	13.60	4.67	5.99	13.60	4.31	6.34	13.61	3.96
HCWU-2	10.91	6.17	13.90	4.74	6.53	14.15	4.38	6.90	14.15	4.01
HCWU-3	9.85	5.49	13.82	4.36	9.82	13.87	0.03	10.13	13.85	-0.28
HCWU-4	8.54	6.60	12.95	1.94	7.40	12.95	1.14	7.09	12.94	1.45
HCWU-5	8.16	6.06	12.38	2.10	7.49	12.32	0.67	7.51	12.33	0.65
HCWU-6	5.84	1.44	10.40	4.40	1.79	10.38	4.05	2.20	10.39	3.64
HCWU-7	5.52	5.25	8.70	0.27	5.13	8.74	0.39	5.33	8.73	0.19
HCWU-8	5.65	0.91	11.85	4.74	7.61	11.90	-1.96	6.98	11.89	-1.33
HCWU-9	5.66	4.61	6.83	1.05	0.90	6.85	4.76	4.33	6.84	1.33
HCWU-10	4.28	3.21	7.60	1.07	4.22	7.60	0.06	3.08	7.60	1.20
HCWU-11	5.96	2.86	8.37	3.10	3.98	8.39	1.98	4.63	8.38	1.33
HCWU-12	5.26	5.09	8.40	0.17	5.85	8.30	-0.59	4.78	8.32	0.48
HCWU-13	4.14	5.22	7.85	-1.08	5.15	7.86	-1.01	5.85	7.86	-1.71
HCWU-14	2.95	-0.57	5.46	3.52	1.58	5.42	1.37	0.80	5.45	2.15
HCWU-15	4.44	4.87	8.75	-0.43	4.60	8.80	-0.16	4.95	8.79	-0.51
HCWU-16	3.98	2.85	8.48	1.13	6.35	8.48	-2.37	4.85	8.50	-0.87
HCWU-17	3.31	1.01	7.49	2.30	4.70	7.50	-1.39	5.05	7.50	-1.74
HCWU-18	3.16	3.25	6.50	-0.09	2.88	6.50	0.28	3.96	6.50	-0.80
HCWU-19	2.97	-0.61	8.40	3.58	2.67	8.41	0.30	4.60	8.40	-1.63
HCWU-20	3.32	2.20	7.31	1.12	0.89	7.30	2.43	1.22	7.30	2.10
HCWU-21	13.41	13.00	16.60	0.41	13.26	17.00	0.15	13.47	17.10	-0.06
HCWU-22	4.99	3.99	9.70	1.00	5.35	9.70	-0.36	7.30	9.69	-2.31
HCWU-23	12.51	12.75	16.30	-0.24	12.58	16.30	-0.07	12.68	16.28	-0.17
HCWU-24	8.78	8.37	13.20	0.41	9.22	13.22	-0.44	9.76	13.19	-0.98
HCWU-25	12.47	9.98	16.31	2.49	12.19	16.35	0.28	14.22	16.34	-1.75
HCWU-26	9.58	9.41	14.42	0.17	8.67	14.38	0.91	8.50	14.39	1.08

Table 1

**Standard Chlorine Chemical Co. Inc.**  
**3rd Quarter 2014 Progress Report**

**HCTS Gauging Data Summary**

Well ID	Top of Casing Elevation MSL (NAD 83)	Jul-14			Aug-14			Sep-14		
		Depth to Water (ft- TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft- TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)	Depth to Water (ft- TOC)	Total Depth (ft- TOC)	Groundwater Elevation MSL (NAD 83)
DRWU-1	5.17	1.10	10.66	4.07	1.40	10.66	3.77	1.96	10.66	3.21
DRWU-2	5.63	1.60	11.78	4.03	1.99	11.78	3.64	2.45	11.78	3.18
DRWU-3	16.13	11.35	22.35	4.78	11.70	22.35	4.43	11.94	22.35	4.19
DRWU-4	4.71	0.65	12.17	4.06	1.02	12.15	3.69	1.32	12.15	3.39
DRWU-5	2.80	-0.84	8.80	3.64	0.11	8.82	2.69	0.71	8.82	2.09
DRWL-1	7.35	2.75	31.90	4.60	3.26	31.90	4.09	3.64	31.90	3.71
DRWL-2	3.09	-0.33	26.95	3.42	0.04	26.95	3.05	0.46	26.95	2.63
DRWL-3	3.87	0.14	28.87	3.73	0.84	28.87	3.03	1.19	28.87	2.68
DRWL-4	5.65	1.76	30.45	3.89	2.34	30.45	3.31	2.78	30.45	2.87
DRWL-5	5.74	1.11	29.65	4.63	1.37	29.65	4.37	2.11	29.65	3.63
DRWL-6	17.36	13.21	40.82	4.15	13.88	40.82	3.48	14.29	40.82	3.07
DRWL-7	2.76	-0.73	27.15	3.49	0.00	27.15	2.76	0.39	27.15	2.37
DRWL-8	3.17	-0.38	28.65	3.55	0.46	28.65	2.71	0.91	28.65	2.26
DRWL-9	4.69	0.71	28.30	3.98	1.41	28.30	3.28	1.90	28.30	2.79
DRWL-10	6.46	3.05	30.60	3.41	4.01	30.60	2.45	4.48	30.60	1.98
DRWL-11	9.05	5.59	33.15	3.46	4.53	33.15	4.52	6.99	33.15	2.06

**STANDARD CHLORINE CHEMICAL CO. INC. SITE – O&M STATUS REPORT  
QUARTERLY OPERATIONS MAINTENANCE AND MONITORING REPORT No. 07  
REPORTING PERIOD – JULY–SEPTEMBER 2014  
KEARNY, NEW JERSEY**

---

**FIGURES**

Figure 1  
 Standard Chlorine Chemical Co. Inc.  
 3rd Quarter 2014











